

10A Avg.

30 Volts

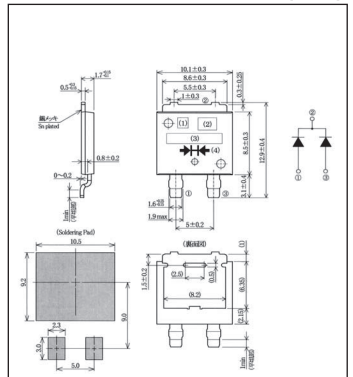
SBD

UCQ10A03

■最大定格 Maximum Ratings (Ta=25°C : unless otherwise specified)

Item	Symbol	Condition	Unit	
くり返しピーク逆電圧 Repetitive Peak Reverse Voltage	V_{RRM}	30	V	
平均整流電流 Average Rectified Forward Current	I_O	50Hz 正弦全波, 抵抗負荷 50Hz Full Sine Wave, Resistance Load	$T_c=133^\circ\text{C}$ $V_{RM}=15\text{V}$	10 A
実効順電流 R.M.S. Forward Current	$I_F(\text{RMS})$	11.1	A	
サーージ順電流 Surge Forward Current	I_{FSM}	120	50Hz 正弦全波 1 サイクル 非くり返し 50Hz Full Sine Wave 1 cycle, Non-repetitive	A
動作接合温度範囲 Operating Junction Temperature Range	T_{jw}	-40~+150	°C	
保存温度範囲 Storage Temperature Range	T_{stg}	-40~+150	°C	

■OUTLINE DRAWING(mm)



■APPROX. NET WEIGHT:0.59g

■電氣的・熱的特性 Electrical/Thermal Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
ピーク逆電流 Peak Reverse Current	I_{RM}	$T_j=25^\circ\text{C}$, $V_{RM}=V_{RRM}$, 一素子あたり Per Diode	—	—	1	mA
ピーク順電圧 Peak Forward Voltage	V_{FM}	$T_j=25^\circ\text{C}$, $I_{FM}=5\text{A}$, 一素子あたり Per Diode	—	—	0.46	V
熱抵抗 Thermal Resistance	$R_{th(j-c)}$	接合部・ケース間 Junction to Case	—	—	2.5	°C/W

■定格・特性曲線

FIG.1
順電圧特性
FORWARD CURRENT VS. VOLTAGE

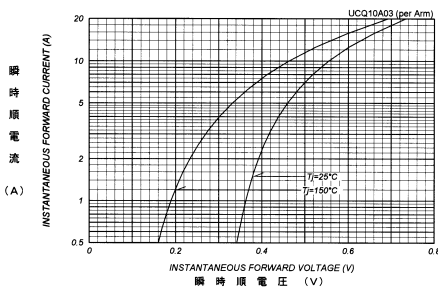


FIG.2
平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

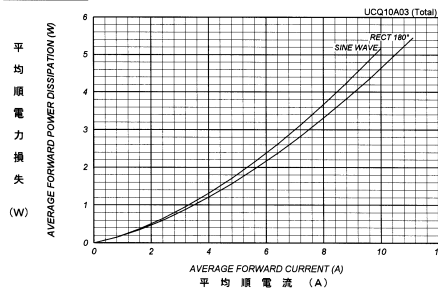


FIG.3
ピーク逆電流 - ピーク逆電圧特性
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE
Tj=150°C

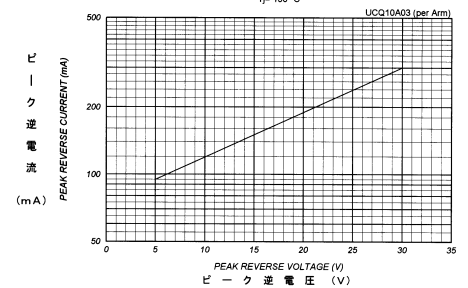


FIG.4
平均逆電力損失
AVERAGE REVERSE POWER DISSIPATION

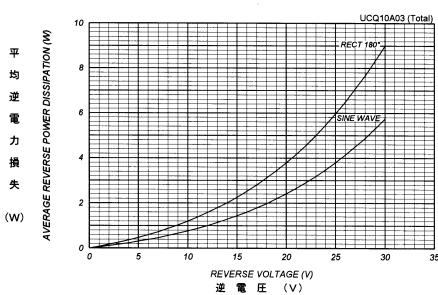


FIG.5
平均順電流 - ケース温度定格
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE
V_{RM}=15V

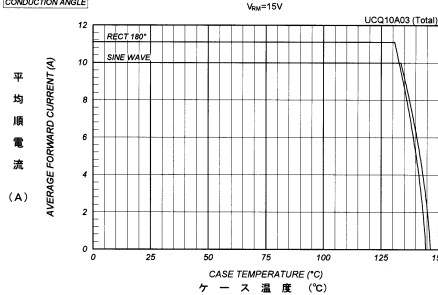


FIG.6
サーージ順電流定格
SURGE CURRENT RATINGS
f=50Hz Half Sine Wave, Non-Repetitive, No Load

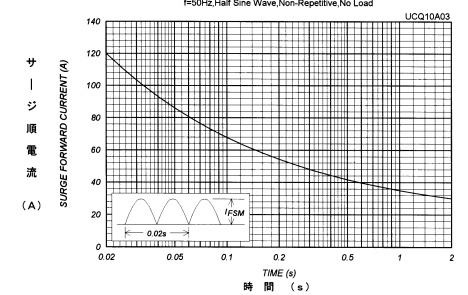


FIG.7
接合容量特性
JUNCTION CAPACITANCE VS. REVERSE VOLTAGE
Tj=25°C, V_m=20V, V_{REV}=F=100kHz, Typical Value

